LCF DIVISION

Procedures and Guidelines for Working in the ISSF

ALCF
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Guidelines for Working in the ISSF

- All work inside the facility must be approved by appropriate LCF Staff
- Do not set items on top of the equipment; racks, electrical panels, fire equipment, EPO switches, etc.
- 36 inch clearance must be maintained in front of all electrical panels
- Egress paths must remain clear
- Avoid storing combustible materials (e.g. boxes, skids, shipping materials, etc.) for extended periods of time and do not store materials below the floor tiles.
- Building 369 Safety Orientation is required (ESH 108-369)
- Use the appropriate PPE for the work being performed
- JHQ (Job Hazard Questionnaire) should reflect the work being performed and the training required up to date
- Set up caution tape and cones to prevent co-workers and visitors from entering a hazardous area (e.g. removing floor panels, pulling cable, swapping power supply units, etc.)
- Review and follow all established procedures (Fire, Safety, Work-planning and control, Removing Floor Panels, and Swapping of Bulk Power Modules)
- Review the evacuation route maps

Emergency Procedures

- **Fire Alarm** – Fire alarm bells ringing and strobe lights flashing indicates that the fire system has detected fire, smoke or that a manual pull-station has been activated. In the case of an alarm evacuate the building immediately to the designated area; (Parking Lot in the front of the building, if weather is bad; assemble in the Lobby of Building 362). If you discover a fire or smoke; call 911 immediately, evacuate all personnel from the area, establish an evacuation route, and then if you are trained to use a fire extinguisher; you may attempt to extinguish the fire.
- **Tornado** – When a tornado warning is announced; all occupants should proceed to the door in the ISSF marked "Tornado Shelter" go out the door, down the ramp and look for the "Tornado Shelter" signs and follow the arrows to the tornado shelter assembly area. The "Tornado Shelter" is in the tunnel below the building. Wait in the designated area until the all-clear is announced.
- **Emergency** – Injury or Illness; Call 9-1-1.

****Emergency Signals in the ISSF:***

- **Emergency Notification**-A signal tone; followed by an emergency announcement (e.g. severe weather) over the public address system.
- **Bell and flashing strobe**-Indicates a Fire Alarm.
- **Yellow flashing light above Fire Panel**-The Pre-action Sprinkler system has tripped.

- **Horn sounding**- The Emergency Alert button outside the ISSF has been pressed; indicating an emergency situation.

Work Planning and Control (Roles and Responsibilities)

- **Work Planning and Control – Line Managers**

- Review the scope of work
- Identify work activities
- Analyze work to be performed for hazards
- Obtain the ESH Coordinator, Building Manager or SME as needed
- Define the precautions that will be followed in performing the work
- Review the hazards with employees before work is started
- Mitigate or eliminate the hazards.
- Stop work; if continuing is determined to be un-safe

- **Work Planning and Control – Employees**

- Assist supervisors in completing a hazard analysis
- Conduct work using hazard controls
- Notify supervisors when changes occur while performing the work
- Provide feedback to supervisors
- Stop work; if continuing is determined to be un-safe

- **Work Planning and Control – Subcontractors**

- Sub-contractors must take the Annual Contractor Safety Orientation (ESH 382
- Sub-contractor must also take Building 369 Safety Orientation (ESH108-369) or be escorted at all times
- Review the Job Safety Analysis and sign
- Must perform work within the scope of the JSA

- Stop work; if continuing is determined to be un-safe

Personal Protective Equipment

When conducting work inside the ISSF; every effort should be made to eliminate or control hazards.

New tasks or equipment may require additional PPE beyond what is listed below. Review ESH Manual (Chapter 12 Personal Protective Equipment) for further information.

For all new tasks a hazard analysis should be conducted to determine the hazards, controls necessary, and the proper PPE. Form ANL-644 (Hazard Assessment Check-list) can be used as a guide for conducting a hazard assessment.

Additionally employees who wear PPE are required to update their eJHQ and complete ESH-195 (PPE Training).

Hearing Protection:

- Is required in the ISSF for employees and sub-contractors conducting work inside the facility.
- Is not required for individuals entering the ISSF for short periods of time. (Visitors, Tours, etc.)

Safety Glasses:

- Are required when removing floor panels
- Are required for working under-floor
- Are required when using wire cutters/strippers and power-tools
- Are required when pulling cable

Work Gloves:

- Are required when removing floor panels
- Are required when racking or un-racking equipment
- Are required when moving heavy equipment
- Are required when unpacking crates and skids
- Are required when using tools with sharp edges or points

Work Shoes:

- Are required for racking and un-racking equipment
- Are required when moving racks or equipment

- Are required when removing or replacing floor panels
- Are required when using pallet jacks or hand operated lifts

Step Ladders and Lifting Equipment

Rolling Step-ladders

- Guidelines for the use of rolling step-ladders:
- Use a step-ladder of the appropriate height; do not reach or stretch.
- Never lean forward when using the top step.
- Place the step-ladder as close to the target as possible.
- Use step-ladders one person at a time.
- If possible to do so use the "hand crank lift" for installing heavy rack equipment; do not try to carry heavy equipment up step-ladders.

*** Note that metal step-ladders should never be used for electrical work.**

Ladders

The guidelines for ladder use can be found in the ESH Manual Section 7.14.6. To use a ladder in the ISSF; you must have completed Ladder Safety Training (ESH117).

Equipment Lifts and Pallet Jacks

Lifts and pallet jacks are commonly used tools in the ISSF. They are used for moving racks and equipment, but as with all tools they should be used safely. Before using this equipment; review the operators' manual and conduct a visual inspection of the equipment; looking for defects or broken

parts, which may make them unsafe to use. Lifts or pallet jacks found to be defective should be removed from service immediately and tagged, “Do not use”.

Guidelines for using a Pallet Jack:

- Check the floor for ruts, bumps and other imperfections;
- Never place your feet under a pallet jack;
- If your view is obstructed, have a co-worker guide the load;
- Never exceed a pallet jack's load capacity;
- Don't use a pallet jack for human transportation;
- When going down an incline, push, don't pull;
- Stick to correct traffic lanes, and be alert to avoid collisions around corners;
- Be aware of pinch-point hazards to your hands; and
- Use proper lifting techniques when loading and unloading.

Guidelines for using the Hand Crank Lift:

- Do not use as a personnel lifting platform.
- Do not exceed the rated load capacity (see operators manual).
- Do not move the machine with a raised load, except for minor positioning.
- Only use lift on a level surface.

Store Them Properly:

When not in use, store pallet jacks and hand operated lifts where they will not create tripping hazards. And make sure that the devices do not block exits or emergency equipment, such as fire extinguishers.

Procedure for Removing Floor Panels

1. Floor panels should only be removed using the provided "Floor Panel Lifters", which are located by the exit doors.
2. Wear the appropriate PPE (safety glasses, gloves)
3. Prior to removing any Floor Panels, Safety cones and caution tape must be set up around the area.
4. The Panel Lifter should be used on the center of the panel, Press down firmly, Lift one edge of the floor panel and slide panel out of the way; Floor panels are heavy (approx. 25 lbs.) keep hands and feet clear.
5. Tiles should fit back in place do not force by kicking or jumping on tiles.
6. Check that replaced tiles are level with adjoining tiles; tiles that are not level become tripping hazards.
7. Replace "Floor Panel Lifter" after use.

Floor Panel Lifter

Safety cones and caution tape

Procedure for swapping Bulk Power Modules

1. Ensure that the individual performing the replacement has taken required Electrical Safety training.
2. Ensure that a signed EEWP (Energized Electrical Work Permit) form ANL-211 is currently in force.
3. Prior to pulling the power supply, prepare a service action for this power supply on the service node. (Note – the power supplies are hot-swappable, so work can still proceed if this step fails).
4. Wear appropriate PPE (Voltage rated gloves, Leather outer gloves, Safety glasses, FR clothing or FR coveralls, and closed-toe shoes).
5. Locate the power supply and verify that the amber light on the power supply is lit. If the light is green, this indicates that you are either looking at the wrong power supply, or the service action above was performed on the wrong power supply. Even without a service action, failed power supplies will normally have an amber indicating light.

6. Set up barricades (cones and caution tape)
7. If a stepladder needs to be used to reach the power supply, ensure that the ladder is non-metallic (i.e. fiberglass)
8. Ensure there is at least one other individual standing by who is aware of the work, at least 3’6” away from the person performing the work.
9. Turn the retaining screw on the upper right of the power supply clockwise until the latch disengages.
10. Pull the power supply partially out of the chassis (far enough to disengage).

11. Wait until all lights on the power supply turn off and the fan has fully stopped.
12. Pull power supply completely out of the chassis and set aside.
13. Insert new power supply into the chassis. Before fully seating the new supply, ensure that the retaining latch is in a vertical position by turning the retaining screw clockwise.
14. Firmly push the power supply into its slot until it is fully seated.
15. Turn the retaining screw counterclockwise to seat the retaining latch into its slot. Ensure that the latch is fully seated in the slot and is oriented horizontally – if it does not seat, turn the screw clockwise several times until the latch is has moved far enough away from you to be in line with the slot, then turn counterclockwise again to seat it in the slot.
16. Continue turning the screw counterclockwise until resistance is felt – the latch should be pushing against the outer edge of its retaining slot. Do not over-tighten.
17. Verify that the new power supply has a lit green light and the fan is running. If amber light is lit, this indicates that the replacement power supply is faulty.
18. On the service node, end the service action on this power supply.

Installing and Removing Equipment from Racks

Installing equipment in racks

- For new tasks; conduct a Hazard Analysis-use ANL-644 (Hazard Analysis Check-list) as necessary.
- Wear required PPE (gloves, safety glasses) and any additional PPE determined by the Hazard Analysis.
- Follow manufactures instructions for installing equipment in racks.
- If equipment is to heavy or awkward-request help as needed and use lifting equipment whenever possible.
- To prevent racks from tipping while installing equipment: Install equipment in the racks working from the bottom toward the top and install heavier equipment lower in the rack.
- Equipment must be secured to the rack.

Removing equipment from racks

- For new tasks; conduct a Hazard Analysis-use ANL-644 (Hazard Analysis Check-list) as necessary.

- Wear required PPE (gloves, safety glasses) and any additional PPE determined by the Hazard Analysis.
- Follow manufactures instructions for removing equipment from racks.
- If equipment is to heavy or awkward-request help as needed and use lifting equipment whenever possible.
- To prevent racks from tipping: remove equipment working from the top down.
- Only extend one piece of equipment at a time.
- If the task requires removing equipment from the lower part of the rack, be sure that the rack is not going to become unbalanced. If necessary install a tip plate.

Appropriate Shoes for Visitors of the ISSF Facility

The machine room floor has vented floor tiles for circulating air in the ISSF; these holes in the floor tile could easily catch the heel of a shoe that is less than 2 inches.***ALL*** visitors wearing heels where the width OR length of the heel is less than about 2 inches must remove their dangerous shoes and put on a pair of the "BLUE CROCS" shoes, before walking around the machine room. If you are escorting a guest or sub-contractor and you think their shoes are not safe for walking around the room, please ask them to slip on a pair of the Blue Crocs. This check is mandatory for people going into the machine room, even if you are not planning on going by the vented floor tiles.

EPO- Emergency Power Off

Emergency Power OFF Buttons

The ISSF is equipped with emergency- power- off (EPO) buttons located by the exit doors. These buttons have a glass protective cover to prevent accidental activation. Depressing one of these buttons will remove all electrical power to the ISSF equipment.

Lights will remain on and wall outlets will remain live. These buttons are labeled and should be activated ***only in a life threatening emergency***, such as, visible sign of fire, electrocution, etc.

ISSF Access

ISSF Access

Access to the ISSF is limited to authorized personnel. Visitors must get approval to enter the ISSF.

The ISSF is equipped with a security system and proximity readers. To enter the ISSF you must have an access card or be escorted. The security system is in an access state; between the hours of 7:00 AM and 7:00 PM. Entering the ISSF after hours will send an alarm to ANL Security.

If you are going into the ISSF after the designated hours; you must notify security at (2-5730).

Acceptance of the Procedures and Guidelines For working in the ISSF Facility

I have read and understand the "Procedures and Guidelines for the ISSF Facility". I agree to follow these procedures and guidelines.

Name: _____ Badge Number: _____

Signature: _____

Date: _____